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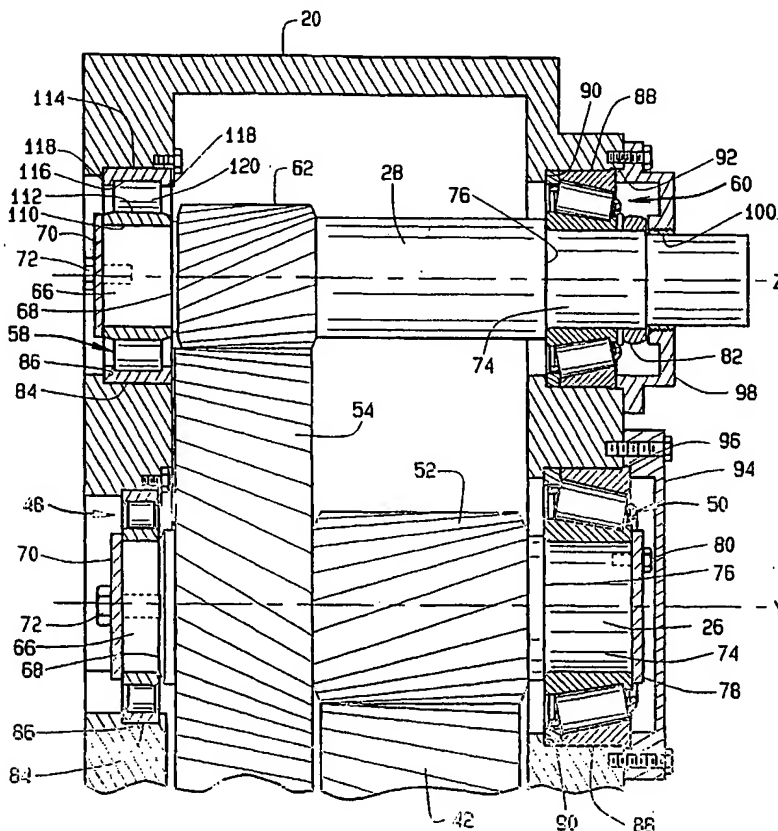
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[Continued on next page]

(54) Title: TRANSMISSION CONTAINING HELICAL GEARING AND BEARING ARRANGEMENT THEREFOR



(57) Abstract: A transmission for a wind turbine includes a housing (20) in which two shafts (26, 28) rotate, each being supported on a locating bearing (50, 60) which transmits thrust loads to the housing as well as radial loads and on a nonlocating bearing (48, 58) which transmits only radial loads to the housing. The shafts carry helical gears (52, 54, 62) which induce thrust loads in the shafts when the shafts transmit torque. The locating bearings are unitized single row tapered roller bearings which are oriented to transmit thrust loads in the primary direction through their raceways (132, 138) and in the secondary direction through ribs (134, 144) at the ends of their rollers (146). The nonlocating bearings take the form of single row cylindrical roller bearings which accommodate differential thermal expansion and contraction between the shafts and housing.



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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